

January 1991

Conference Literature

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Recommended Citation

Saylor, Marsha (1991) "Conference Literature," *Sci-Tech News*: Vol. 45: Iss. 1, Article 4.
Available at: <http://jdc.jefferson.edu/scitechnews/vol45/iss1/4>

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CONFERENCE LITERATURE

MARSHA SAYLOR, EDITOR

Hello! As a Librarian who has learned the importance of Conference Proceedings the hard way (I am seldom able to locate a requested conference in anything approaching "real" time), I am hoping this column will help keep you up-to-date about a few of the many conferences of interest to *Sci-Tech News* readers. As there are thousands of conferences held yearly (IEEE alone sponsors or co-sponsors almost 400 major conferences a year), I would appreciate any assistance you can give me by notifying me of pertinent published conference proceedings. I also welcome conference reports from attendees. Any summary should be limited to recent conferences, no more than 300 words, and double-space typed. For more information, contact Marsha Saylor at (512) 242-4231, or write me at Hoechst Celanese, Research Division, 1901 Clarkwood Road, P.O. Box 9077, Corpus Christi, TX 78467-9077.

CONFERENCE SUMMARIES

Military Communications

MILCOM 90: A new era: 1990 IEEE Military Communications Conference; 1990 September 30-October 3; Monterey, CA. Status of published proceedings: Piscataway, NJ:IEEE Service Center; 1990. (Note: Mr. Thomas A. Goncharoff, Finance Chair, has made an offer to all interested Libraries. For the cost of shipping, he will send one complete set of the

three-column digest upon request while copies are available. Mr. Goncharoff may be reached at Lockheed Missiles & Space Company, Inc., 0/62-42, B/076, P. O. Box 3504, Sunnyvale, CA 94088-3504, FAX (408) 742-2505 or telephone (408) 756-5630.)

This international conference (supported or sponsored by IEEE, AFCEA, and DOD) resulted in a three-volume digest that includes all papers presented at the unclassified sessions. Papers were solicited based on the theme of the conference, A New Era, and reflects future technologies in the area of military communications.

Some of the broad areas of communication covered include Networks, Signal Processing, Integrated Circuits, Satellite & Microwave Systems, Mobile Communication, Modulation & Coding, Defense and MILSSAT-COM Technologies, Antenna & Other Communications Systems, Spread Spectrum Communications, Modulation and Communication Theory.

The index lists Conference Tutorials with the presenter and title of Classified Sessions with panel members although neither is printed in the Digest.

CAD/CAM

CAD/CAM, Robotics, & Factories of the Future: 5th International Conference on CAD/CAM, Robotics & Factories of the Future (CARS

& FOF '90); 1990 December 2-5; Norfolk, VA. Status of published proceedings: New York: Springer-Verlag; in publication.

224 research papers, 48 technical sessions, and 8 workshops were presented at this conference sponsored by Old Dominion University. The major themes at the conference were Robotics, CAD/CAM, Management, Information Technology, Analytical Modeling, Automated Assembly, and a National Teleconference sponsored by Northrop on the Paperless Airplane.

In the field of Robotics, the topics covered were Trajectory Planning, Kinematics, Robot Operations, Advances in Applied Robotics, Flexible Manipulators, Applications, Workspace Design, Multivalue Coding, System Techniques, Sensors, and Articulated Robots.

The sessions on CAD/CAM included Concurrent Engineering, Applications, Use in Underground Structure, Group Technology, Process Planning, Machine Tools, Parametric Models and Materials, and Flexible Manufacturing Systems. Production Planning and Scheduling, Manufacturing Enterprises, Cost Aspects, Factory of the Future, Manufacturing Education, and Quality were the Management areas addressed.

Information Technology covered the subjects of Knowledge-Based Systems, Computer Simulation, AI in Design and Manufacturing, CAD/CAM/CIR Data Interchange, Neural Networks, and Computer Support for CIM.

The Analytical Modeling section was devoted to Finite Element Applications, Geometric Models, Analytical Models, and Finite Element Analysis and Modeling.

The single session devoted to Automated Assembly contained papers devoted to Angu-

lar Errors, Contact and Geometry of Features, Real-Time Simulation Control, and Quality Consideration.

Online

Online/CD-ROM '90 Conference Proceedings; November 5-7, 1990; Washington, DC. Weston, CT: Online; 1990.

The ONLINE/CD-ROM Conference was held in Washington on November 5-7, 1990. As the title of the conference indicates, CD-ROMs played a major role, both in exhibits as well as papers. In the opening Peggy Fischer pointed out that there are now some 6600 databases available to the public, of which around 40% are now in CD-ROM format. There are 850 to 1000 database vendors in 38 countries. It is interesting for sci-tech librarians to note that the outstanding database product of the year was the Beilstein Online file.

There were many pre- and post-conference training sessions, of which a large percentage concerned CD-ROMs—such as how to publish your own, how to install your own, and how to manage the use of a CD-ROM. The role of CD-ROMS in LANs was another popular topic.

For the second time the conference included a separate program entitled Data Bases in Schools, aimed at database educators. Many school librarians were in evidence.

The 173-page conference proceedings volume is available from ONLINE magazine. It contains a variety of papers, ranging from use of CD-ROMS to updating of commercial databases to techniques of online instruction.

Ellis Mount
Columbia University

PUBLISHED PROCEEDINGS

Earth Sciences

Earth's rotation from eons to days. Edited by Professor Dr. Peter Brosche and Professor Dr. Jurgen Sundermann. New York: Springer-Verlag; 1990. 255p. ISBN 3-540-52409-6.

The proceedings of a workshop entitled Tidal Friction and Earth's Rotation are presented. The Workshop was held from September 26-30, 1988, at the Center for Interdisciplinary Studies of the University of Bielefeld, Germany. Twenty-three sections by thirty-two authors examine the changes in the rotation of the earth as influenced by various factors such as celestial mechanics, solid earth effects, atmospheric impacts, and tectonic consequences. The measurement of earth's rotation by Very Long Baseline Interferometry is identified as the observational technique which can most accurately determine the polar motion and nutation of the earth. Many tables and mathematical models are used to support the written text. The intellectual level of the material requires considerable background in geodesy, tectonics, and celestial mechanics for adequate reader comprehension.

Philip N. French
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RMS Associates

Library and Information Science

Commitment to service: the library's mission. Edited by Alphonse F. Trezza. Boston: G. K. Hall; 1990. 149p. \$22.50.

The papers included in this book were presented at the 1989 Florida State University Library Conference, held March 12-15, 1989. The keynote of the conference was service to

users in a market-driven environment. Written by practicing librarians from a variety of types of libraries, these twelve readable papers are relevant to librarians and library managers in all fields of librarianship who are interested in providing excellent customer service. The papers provide a review of the issues over a range of library activities: reference services for today and tomorrow; resource sharing and collection development; serving our varied clientele; impact of a new major facility on library services; and impact of technology on staffing.

Carolyn Sidey
Xerox Research Centre of Canada

Materials Science

Cold fusion. Conference held by the Materials Research Society at San Diego, CA on April 26, 1989. Pittsburgh, PA: Materials Research Society; 1989. 2 v. VMS, \$200.00

Two video tapes of the historic Materials Research Society conference present the theories, techniques, and results of several researchers. Each speaker's presentation is followed by discussions with members of the audience. The intellectual level of the presentation requires strict listener concentration.

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Composite materials design and analysis.

Edited by W. P. de Wilde and W. R. Blain. Southampton, Boston: Computational Mechanics Publications; 1990. ISBN 0-945824-45-9.

In the United States, we rarely look outside our own backyard when it comes to advances in composite materials technology. However, this book documents the papers presented at

the Second International Conference on Computer Aided Design in Composite Materials Technology, which was held in Brussels, Belgium. Since most of the papers are from Europe, it gives a good representation of the advances taking place there. The papers also deal with the entire range of composites research and development. There are papers that deal with an almost entirely experimental approach, some that are purely analytical and others that offer a mixture. The book assumes a working knowledge of composite theory, terminology and structures in general. Among the topics covered are a variety of finite element modelling techniques, optimization methods, joint analysis, and 3-D buckling. The book would most benefit those trying to keep abreast of new developments in the composites field, and offers such a variety of topics, that there is something of interest for everyone here.

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Materials Research Society: Proceedings of the MRS International Meeting on Advanced Materials, Vol. 7, Superplasticity. Edited by Masao Doyama, Shigeyuke Sumiya and Robert P. H. Chang. Materials Research Society, 9800 McKnight Road, Pittsburgh, PA. 1989. 317p. \$52.00. ISBN 1-55899-035-4.

The reference guide on Superplasticity is the seventh volume of a fourteen-volume set on the proceedings of the First Materials Research Society International Meeting on Advanced Materials. This volume is a compilation of thirty-four research publications that focus on superplasticity in advanced materials including metals, intermetallic compounds, composites, and ceramics. Each document

includes an abstract, an introduction of content, charts, graphs, formulas, illustrations and a list of references. The volume is broken down into two parts, part one entitled "Superplasticity of Metals and Alloys," and part two entitled "Superplasticity of Advanced Ceramics." The content of the book is well developed with clear and concise terminology and also has the benefits of excellent illustrations and graphs. The index includes authors and subjects, and there is also bibliographic information on the other thirteen volumes.

This is a very detailed and structured reference guide that will serve as a basis and a supplement for any scientist that is involved in the field of superplasticity. It would be a valuable addition to any research library or facility.

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Nuclear Physics

Design and instrumentation of in situ experiments in underground laboratories for radioactive waste disposal. Edited by B. Come. Boston: A. A. Balkema; 1985. 474 p. \$60.50.

This compilation of the proceedings of an international conference provides a reasonable international overview, circa 1984, of in situ radioactive waste experiments and associated instruments for geologic disposal of high level and transuranic waste. About half the papers are in French and the rest are in English. Abstracts in both languages are provided for most of the papers. All of the discussion summaries and session overviews are presented in English. Although the papers vary in level of detail and quality, few are highly technical. Sufficient detail is provided to describe the concepts, so the information provided can be useful to a wide range of

individuals working in the field of geologic disposal of radioactive waste. Generally, the design information is not sufficient for development of instruments, but does provide guidance on past or present efforts in some areas that merit further inquiry and scrutiny.

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Physics

Whither turbulence? Turbulence at the crossroads. Edited by J. L. Lumley. New York: Springer-Verlag; 1990. 535p. \$60.00. ISBN 3-540-52534-1.

This is contribution number 357 of the Lecture Notes in Physics series. It presents papers and transcripts of discussions from a workshop on turbulence held at Cornell University in 1989. An international group of scientists gathered to address some topics that are "the subject of controversy in the literature," i.e., traditional approaches, the role of organized motion, dynamical systems approach, large eddy simulations, cellular automata, and phenomenological modeling. The authors provide scholarly articles and each section concludes with candid comments from the participants. Researchers, representatives of funding agencies, and students of turbulence can benefit from this broad and timely review—this is not just another turbulence textbook.

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AEROSPACE

